

Application No.: 09/588,350

Docket No.: 20162-00557-US

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method of processing an issuance of an electronic ticket in a rights information processing system in which user terminal units, issuer units, and account units are interconnected on a communication network through which electronic tickets can be circulated, comprising the steps of:

(a) transmitting an account address and a demand for issuance from a user terminal unit to an issuer unit;

(b) causing the issuer unit to transmit the demand for issuance to an account unit which corresponds to the account address;

(c) to obtain a user identifier from the account unit;

(d) to prepare an electronic ticket inclusive of the user identifier;

(e) to transmit the electronic ticket to the account unit through the communication network; and

(f) causing the account unit corresponding to the user's account address to store the electronic ticket in a storage in said account unit;

wherein the step (d) comprises the steps of:

(d-1) causing the issuer unit to access the account address of the user upon receiving the demand for issuance;

(d-2) causing the accessed account unit to transmit a certificate of account address which guarantees a correspondence relationship between the account address assigned to the user and an identifier of the user of the account unit to the issuer unit; and

(d-3) causing the issuer unit to verify the certificate of account address and allowing it to use the identifier of the user contained in the certificate of account address as the user identifier upon successful verification.

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2. (Canceled).

3. (Previously presented) A method of processing a consumption treatment of an electronic ticket in a rights information processing system in which user terminal units, account units and ticket examiner units are interconnected on a communication network through which electronic tickets can be circulated, comprising the steps of:

(a) transmitting an account address which is derived from a portable processor to a ticket examiner unit;

(b) causing the ticket examiner unit to be connected with an account unit at the account address to demand a necessary electronic ticket;

(c) causing the account unit to derive the demanded electronic ticket and to transmit it to the ticket examiner unit; and

(d) causing the ticket examiner unit to verify the electronic ticket to render a decision whether the electronic ticket should be passed for a ticket examination or not.

4. (Previously presented) A method according to Claim 3 in which the step (d) comprises;

(d-1) demanding the portable processor to generate a signature to a certificate of consumption,

(d-2) causing the portable processor to generate the signature and to transmit to the ticket examiner unit, and

(d-3) causing the ticket examiner unit to verify the signature.

5. (Previously presented) A method according to Claim 3, in which the step (c) comprises the steps of verifying a circulation condition on the ticket examining side for the derived electronic ticket, and transmitting it to the ticket examiner unit upon successful verification.

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6. (Previously presented) A method according to any one of claims 3, 4, and 5, in which the step (d) comprises verifying a circulation condition on the user side for the received electronic ticket, and using a result of such verification for deciding whether the electronic ticket should be passed for ticket examination or not.

7. (Previously presented) A method of processing a transfer treatment of an electronic ticket in a rights information processing system in which a user terminal unit and an account unit are connected together on a communication network through which electronic tickets can be circulated, comprising the steps of:

(a) causing a user terminal unit to transmit a demand for transfer inclusive of an identifier of an electronic ticket and a transferee address to an account unit of a transferer;

(b) causing the account unit of the transferer to transmit the electronic ticket to an account unit at the transferee address; and

(c) causing the account unit of the transferee to store the electronic ticket in the account unit of the transferee.

8. (Previously presented) A method according to Claim 7, in which the step (b) comprises the steps of;

(b-1) when the account unit of the transferer accesses the account unit of the transferee, causing the account unit of the transferee to transmit a certificate of account address which guarantees a correspondence relationship between the account address and an identifier of a user of the account unit to the user terminal unit through the account unit of the transferer;

(b-2) causing the user terminal unit to verify the certificate of account address and to transmit a result of such verification to the account unit of the transferer; and

(b-3) causing the account unit of the transferer to transmit the electronic ticket upon finding that the received result of verification is acceptable.

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9. (Previously presented) A method according to Claim 7 or 8, in which the step (a) comprises the steps of:

(a-1) when a portable processor is loaded into the user terminal unit, using an account address of the transferer which is internally contained in the portable processor to achieve a connection with the account unit of the transferer to present a demand for a list of electronic tickets;

(a-2) causing the account unit of the transferer to prepare a list of electronic tickets which is demanded and to transmit it to the user terminal unit; and

(a-3) causing the user terminal unit to transmit to the account unit of the transferer a transferee address and the demand for transfer together with an identifier of an electronic ticket which is selected by the transferer from the list of electronic tickets.

10. (Previously presented) A method according to Claim 7 or 8, further comprising the steps of;

(d-1) causing the account unit of the transferer to demand a certificate of transfer;

(d-2) causing the user terminal unit to prepare a certificate of transfer with signature and to transmit it to the account unit of the transferee through the account unit of the transferer;

(d-3) causing the account unit of the transferee to store the received certificate of transfer with signature.

11. (Previously presented) A method according to Claim 10 in which the step (d-2) comprises the steps of:

(d-2-1) causing the user terminal unit to demand the signature to the certificate of transfer to the portable processor;

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(d-2-2) causing the portable processor to generate the signature to the certificate of transfer to prepare the certificate of transfer with signature and to transmit it to the user terminal unit; and

(d-2-3) causing the user terminal unit to transmit the certificate of transfer with signature to the account unit of the transferee through the account unit of the transferer.

12. (Previously presented) An account unit used in rights information processing system in which a user terminal unit, an issuer unit and a ticket examiner unit are interconnected on a communication network through which electronic tickets can be circulated,[[;]] comprising:

communicating means which is accessed at a specific account address;

storage means for storing electronic tickets;

receiving processor means for processing at least one of a transfer treatment and issue treatment of electronic tickets;

consumption processor means for processing a consumption treatment of electronic tickets.

13. (Previously presented) An account unit according to Claim 12, in which the receiving processor means comprises means responsive to a demand for transfer to transmit a certificate of account address which guarantees a correspondence relationship between the account address of an account unit and an identifier of a user of the account unit to the accessing side issuer unit, means for receiving an electronic ticket from an issuer unit, and means for storing the received electronic ticket in said storage means.

14. (Previously presented) An account unit according to Claim 12 or 13, in which the consumption processor means comprises means responsive to a presented ticket examining condition to retrieve and derive the electronic ticket which conforms to the ticket examining condition from the storage means, means for verifying the

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circulation condition for the derived electronic ticket, and means for transmitting the electronic ticket to the ticket examiner unit upon successful verification.

15. (Previously presented) An account unit according to Claim 12 or 13, further comprising transfer processor means which comprises means for accessing an account unit at a transferee address upon receiving an identifier of an electronic ticket, a transferee address and a demand for transfer from a user terminal unit, means for transmitting the electronic ticket to the account unit of the transferee upon receiving a notice of successful verification from the user terminal unit indicating the validity of the account unit at the transferee address, and means for preparing a certificate of transfer with signature which indicates that the electronic ticket is transferred to the transferee and for transmitting it to the account unit of the transferee.

16. (Previously presented) A user terminal unit in rights information processing system in which a user terminal unit, an issuer unit and an account unit are interconnected on a communication network through which electronic tickets can be circulated, comprising:

means for receiving a user account address and adapted to be connected to an account unit which is specified by the account address;

means for demanding a transfer by transmitting an identifier of an electronic ticket and an account address of a transferee to the account unit during a transfer treatment of an electronic ticket; and

verifying means for verifying a certificate of account address which is transmitted from the account unit of the transferer and comparing the account address indicated on the certificate of account address and the account address of the transferee which has been transmitted for coincidence.

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17. (Previously presented) A user terminal unit according to Claim 16, further comprising means for demanding a loaded portable processor to generate a signature to a certificate of transfer, for verifying a certificate of transfer with signature thus obtained and for transmitting it to the account unit of the transferee through the account unit of the transferer.

18. (Previously presented) A ticket examiner unit in rights information processing system in which a user terminal unit, a ticket examiner unit and an account unit are interconnected on a communication network through which electronic tickets can be circulated, comprising

means for receiving a user identification information and an account address from a loaded portable processor for connection with an account unit which is specified by the account address;

means for demanding an electronic ticket which is to be examined from the account unit, verifying the received electronic ticket and transmitting a result of verifying to the account unit; and

means for demanding the portable processor to make a signature to the certificate of consumption and for verifying the signature thus obtained.

19. (Previously presented) Rights information processing system in which a user terminal unit, an issuer unit and an account unit are interconnected on a communication network through which electronic tickets can be circulated, comprising:

a plurality of account units connected to the communication network and accessed by an account address which is assigned to each user for managing electronic tickets of a user, each account unit including a storage for storing the electronic tickets of the user, and

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terminal means connected to the communication network for accessing the account unit by means of the account address of the user to present a demand for treatment which is either transfer or consumption of an electronic ticket.

20. (Previously presented) Electronic ticket processing system according to Claim 19, further comprising a portable processor physically carried by each user to be detachably loaded in the terminal means, said portable processor holding the account address and the identification information of the user and comprises means for generating a signature of the user.

21. (Previously presented) Electronic ticket processing system according to Claim 20, in which the terminal means includes a plurality of user terminal units, each of the user terminal units including means for presenting a demand for transfer treatment by entering and transmitting to the account unit of the transferer an identifier of the user, an identifier indicating the electronic ticket to be transferred and an account address of a transferee during a transfer treatment,

the account unit of the transferer including means for demanding a certificate of account address from an account unit at an account address of the transferee, for transmitting the certificate of account address which is received from the account unit of the transferee to the user terminal unit and transmitting the electronic ticket to the account unit of the transferee upon receiving a successful result of verification from the user terminal unit,

the account unit of the transferee including means for storing the electronic ticket.

22. (Previously presented) Electronic ticket processing system according to Claim 21, in which the account unit of the transferer includes means for demanding a certificate of transfer to the user terminal unit, and means for transmitting the certificate

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of transfer with signature which is received from the user terminal unit to the account unit of the transferee,

the user terminal unit including means for preparing the certificate of transfer with signature and for transmitting the certificate of transfer with signature which is thus obtained to the account unit of the transferee through the account unit of the transferer,

the account unit of the transferee including means for retaining the certificate of transfer with signature which is received from the account unit of the transferer.

23. (Previously presented) Electronic ticket processing system according to Claim 20, in which the terminal means comprises a plurality of ticket examiner units, each of the ticket examiner units including means for transmitting an identifier indicating an electronic ticket which is to be examined, to the account unit of the user to demand electronic ticket, and means for verifying an electronic ticket which is received from the account unit of the user, for demanding the portable processor to generate a signature to the certificate of consumption upon successful verification and for verifying the signature which is received from the portable processor to render a decision to enable or disable a ticket examination.

24. (Previously presented) A recorded medium having a program recorded therein which is used to execute a method of processing an electronic ticket in an account unit of a rights information processing system in which a user terminal unit, an issuer unit, a ticket examiner unit and an account unit are interconnected on a communication network through which electronic tickets can be circulated, the program comprising the steps of:

(a) receiving an access at an account address;

(b) transmitting a certificate of account address which guarantees a correspondence relationship between a particular account address and an identifier of a user of a corresponding account unit to an accessor;

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- (c) receiving an electronic ticket from the accessor; and
- (d) storing the electronic ticket in storage means.

25. (Previously presented) A recorded medium according to Claim 24, the program further comprising the steps of:

- (f) receiving a ticket examining condition from a ticket examiner unit;
- (g) retrieving and deriving an electronic ticket which is subject to the ticket examining condition from the storage means; and
- (h) transmitting the electronic ticket to the ticket examiner unit.

26. (Previously presented) A recorded medium having a program recorded therein which is used to execute a method of processing an electronic ticket in a ticket examiner unit of rights information processing system in which a user terminal unit, a ticket examiner unit and an account unit are interconnected on a communication network through which electronic tickets can be circulated, the program comprising the steps of:

- (a) receiving a user identification information and an account address from a loaded portable processor;
- (b) achieving a connection with an account unit which is specified by the account address;
- (c) demanding an electronic ticket, which is to be ticket examined, from the account unit;
- (d) verifying the received electronic ticket and transmitting a result of verification to the account unit; and
- (e) demanding the portable processor to generate the signature to the certificate of consumption and verifying the signature which is thus obtained.